OCT 112006

Application No. 10/541,070

REMARKS

Claims 1-12 are pending in this application. By this Amendment, claims 3, 5 and 9 are amended to be in independent claim form by incorporating claim 1 into each of these claims. No new matter is added. Support for the amendments is found in the specification and original claims.

I. Allowable Subject Matter

Applicants thank the Examiner for the indication that claims 3, 5 and 9 contain allowable subject matter. As such, these claims have been amended to each be in independent claim form. Claims 3, 5 and 9 should thus be in condition for allowance.

Applicants also thank the Examiner for the indication that claim 12 is allowed.

II. Rejections Under 35 U.S.C. §103(a)

A. Suhara in view of JP 410

Claims 1-2, 4, 6, 8 and 10-11 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 5,953,204 (hereinafter Suhara) in view of JP 2001-146410 (hereinafter JP 410). This rejection is respectfully traversed.

Claim 1 recites an electrochemical capacitor comprising an anode and a cathode opposing each other, an insulating separator disposed between the anode and cathode, an electrolytic solution and a casing accommodating the anode, cathode, separator, and electrolytic solution in a closed state, wherein the anode contains a substantially spherical carbon material having an electronic conductivity as a constituent material and the cathode contains a fibrous carbon material having an electronic conductivity as a constituent material.

Suhara discloses an electric double layer capacitor that includes a positive electrode having a current collector combined with a polarizable electrode material composed mainly of activated carbon, a negative electrode having a current collector of porous metal incapable of forming an alloy with lithium, combined with a carbonaceous material having lithium ions

occluded by a chemical method or an electrochemical method to a carbon material capable of occluding and releasing a lithium ions, and a nonaqueous electrolyte containing a lithium salt.

See the Abstract of Suhara.

Suhara fails to teach or suggest an electrochemical capacitor having a cathode comprising a fibrous carbon material, as required in claim 1. Suhara merely discloses that graphitized carbon fibers may be used as the carbonaceous material for the <u>negative electrode</u> (the anode in Suhara, as explained below) See column 6, lines 4-10 of Suhara. Suhara does not disclose that graphitized carbon fibers are used as the carbonaceous material for the positive electrode/cathode.

In the present invention, the anode and cathode are determined according to their polarities at the time of discharging the electrochemical capacitor (see paragraph [0010] of the present specification). As such, the negative electrode in Suhara corresponds to an anode and the positive electrode in Suhara corresponds to a cathode. Suhara thus fails to teach or suggest use of a fibrous carbon material in a cathode of an electrochemical capacitor as in present claim 1.

The Patent Office admitted that Suhara also does not teach use of an activated carbon powder that is substantially spherical. The Patent Office turned to JP 410 as allegedly teaching activated carbon powder that is substantially spherical. JP 410 discloses an active carbon obtained by mixing a granular carbide in a spherical shape with a carbide having a smaller grain diameter than that of the granular carbide and active carbon.

Even if JP 410 were to have been combined with Suhara, the subject matter of the present claims would not have been achieved. JP 410 does not remedy the deficiencies of Suhara detailed above. For example, like Suhara, nowhere does JP 410 disclose an electrochemical capacitor wherein a cathode includes a fibrous carbon material having an electronic conductivity as a constituent material.

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For all the foregoing reasons, Applicants respectfully submit that Suhara and JP 410 fail to teach or suggest claims 1-2, 4, 6, 8 and 10-11 of the present application.

Reconsideration and withdrawal of this rejection are respectfully requested.

B. Suhara in view of Sonobe

Claims 1 and 7 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Suhara in view of U.S. Patent No. 6,258,337 (hereinafter Sonobe). This rejection is respectfully traversed.

Sonobe also does not remedy the deficiencies of Suhara discussed above. The Patent Office turned to Sonobe as allegedly teaching activated carbon material having a spherical shape for use in electrochemical capacitors.

Sonobe discloses a carbonaceous material suitable as an electrode material for electric double layer capacitors having a large capacitance volume, a low electrical resistivity and a large bulk density. See the Abstract of Sonobe. However, even if Sonobe were to have been combined with Suhara, Sonobe fails to remedy the deficiencies of Suhara. For example, like Suhara, nowhere does Sonobe disclose an electrochemical capacitor wherein a cathode includes a fibrous carbon material having an electronic conductivity as a constituent material.

For all the foregoing reasons, Applicants respectfully submit that Suhara and Sonobe, alone or in combination, would not have led one of ordinary skill in the art to claims 1 and 7. Reconsideration and withdrawal of this rejection are respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-12 are earnestly solicited.

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Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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